

**OBSERVERS:** SMITHSONIAN INSTITUTION DIVISION OF BIRDS Ship AT SEA DAILY LOG - E Date 11 Apr. 67 Direction SPECIMEN Pg.# or DIR. BAND NO. REMARKS SPECIES TIME 5/5 4 Karin 0806 W OF 5/5 NE 0811 3 5/5 0814 NW 0815 3 0825 11 NW 0827 22 W following, no white rump. 28 BFA 32 5/5 5 W 35 W 37 1 2 5W 38 1 1 NW 40 1/ NW 43 11 NW 44 NW 46 NW 49 H NW 51 1. 3 W 52 11 2 NW 59 11 WW NW 0900 03 NW N 04 NW 06 00 NU 25 NW Coull 270 anthe of Hol Man-o-war type Jelly Fish End Bours 18 5/54 N shear / Pet 5 4 34 BFA -Following ac Pale-Foot 5 W 5/54 2 3 NW N 1005 Jager CR -Following AA 3 W. 6011 Cee 1018 galga on Hao 5 5/5ch 1025 w GYLL W 1037 34 5/5/5 SI-MNH-958-e 1051 2 Rev. 5-66

**OBSERVERS:** SMITHSONIAN INSTITUTION DIVISION OF BIRDS Ship AT SEA DAILY LOG - E Direction Date 19 Maril 67
Pg.# 4 SPECIMEN or BAND NO. REMARKS SPECIES DIR. TIME 1149 5/56 5 51 11 S 11 5 11 5 55 11 N distant 5 11 58 - flushed from HzO Subirus 6011 1200 De 5/56 1201 5 03 SKUA flughed from H20 COR Fulmur light cee 5/5/ 5 07 SW Tollowing 08 SW 5 10 cle 5/56 13 NUE 17 Sw 20 11 coae 3 5 5w Non SW - Enter Grid 1243 Cle 5/51 34-58122-07 1258 1259 - Soul(1) 3459 122-10 WRSP 1303 0 1304 5/506 W 1310 5 1314 BFA 1320 - all with dark rump. 5/58 1323 W 5 1340 1415 Following, all with dark rump 4 BFA Cal. Sea Lion 1 - 34-59,22-24 1417 1422 Storm Pet. W 1425 Following, all w/dark umps For Scal? 2 (Flippers out of H2D) SI BFA 5 1428 SI-MNH-958-6 1432 NW 34-59 122-26 Rev. 5-66

**OBSERVERS:** SMITHSONIAN INSTITUTION DIVISION OF BIRDS Ship AT SEA DAILY LOG - E Direction SPECIMEN or DIR. BAND NO. REMARKS SPECIES TIME adult following (still following at 1500) 1445 Herri Gull 1448 WRSP 1451 BFA Following, I w/ white rump, rest dans Small Pterodrama 1456 Followed briefly: very white underwings, flight distinctive (suggestive of p. puffinus). Head and back con-color: P. cookii? 1528 Smell Pt white underparts, small, distant, flight 1532 WRSP Like That of Bulwars Pet. de an -disturt 1552 Sheur/Pet Stringstod 1355 de WRSP 1600 0 al.; following (still following et 1700) H. GULL 1610 0 WRSP 1611 seal op. (1) 34-59-122-43 16/3 WRJP 9 1667 1620 PTEAU SP small white underports, distant N 1635 WRJP S) O 1655 5/5/ N 1705 WRSP W 1732 500 1240 Storm Pet 1800 34-59 123-04 160/ WASP 2 ac 18/5 W 1818 Seal (2) 34-59 WRSP 52 ale æ under wings, flapping flight, Small Pt. W WRSP 1830 W Show/Put W WRSP 1835 SW 1839 Storm Pet. Ad Following 1840 Cle H. 6all -Suncet close of servet ions 1845 BFA cel WASP Q 1447 SI-MNH-958-e 2 Rev. 5-66

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Ship Directio		SP	SMITHSONIAN INSTITUTION  DIVISION OF BIRDS  AT SEA DAILY LOG - E  SPECIMEN Wootarned Grid  or			Date /94pril6/ Pg.#	
TIME	SPECIES	#	DIR. B.	AND NO.	REMARKS	1 '	
2045 2134 2144 2189 2200 2210 2228 2242 2245	Small bind BAA Story Pot WBSP Pholonyre Show / Pot Pholonyre 11		w car		- Bagin Assor	ndemath.	Your a wanty pe Jolly Riss
							SI- MNH-958-e
							Rev. 5-66

Date 20 April 1967
Pg.#

OBSERVERS:

	1		S	SPECIMEN Pg.#_	
TIME	SPECIES	#	DIR.	BAND NO. REMARKS	
aru-				SUNRISE	
0545				begin observations	
0604	H.G.	1		ad followind . shoddy Right primar	105
0631	sm. Sterodr.	(	N		
0655	Sm. Pterod.	Ī		Pretty dark underwing, all most no black bor	ler: back
0702	Shear/Pet		N	Same as above	
0710	116	,	NW	still following: ad./w shoddy right prima	•
0713	BEA			Still tollowing: ad./w shoddy right prima	iries
07/7	5m. Pterod.	,		following: Dark rump.  Same at 0631	
0720	"	1	N	Same at 0631	
0730		Z	11	//	
0730	1.11	21	5		
0731		1	W		
0738		1	000		
0742	Sm. Pterod.	1	N	light at 0631, head & back con-color	7
0745		7	Al w		
0750	BF4	2 _		Following, dark rump	
0753	Phal. sp	7	W	Λ	,
0804	Shear /Pet	/	NW -	white below.	
0805	RED PHAL.	11 _	N -	flusteal from H20 W	
0907	PTERO. SP.	2	00	flusteal from H20 W	
0810	RITTB R. Phal.	30 24	5		(
0816	11	30 -4	E	feeled from H30 bE	
0826	phal. Mp.	5 -		on H20	
0841	REP Phal.	9-		11	
0851-					126-00
0908		1	SE	white Below	
3-920		18	w	All duris, Possibily Heardels	
0433	Small Pt	1	E	All durl'	
0937	B. Phul	2015	NW	1 Della de la colonia	
	H. Gull	/	00-	Following Ad, 9th & prinning 1955 mg	1 1
0950	1 '	/	5	polow, district Blush Border on wings - un	'A.
1005		l	S	all the way around	
				CCT65	SI-MNH-958-e
					Rev. 5-66

OBSERVERS: SMITHSONIAN INSTITUTION DIVISION OF BIRDS Ship AT SEA DAILY LOG - E Direction Date 20 Apr 67 SPECIMEN Pg.# 2 or SPECIES DIR. BAND NO. REMARKS TIME R.Phal 1004 6 on Ho 1004 Pterod. AP very light underride, molt on wings. 00 10015 BFA Sollowing, I w/ white ump. 1025 R. Phal 8 W WRSP 3 1030 a 5m. Pter. heavy molt-szapotons wing coverts 1040 Sm. Pter 3 sitting on H20 WYSP 2 Sm Pter Z WRSP Black-belly 45 NW Plovex 46 5mPtes NW fairly dark underwing border 47 N 1 . 47 WRSP Q 1059 on H20, 5 in full Breed. plum. RPhal. 33 1121 on Han 1125 0 WRSP 1145 0 STORM PETSE 1153 WASP 1200 a 25 ts B. Phul 1259 600 LEUTH TIE NOT retrieved men Gull? 1320 C011 BAH, TJL H.G. 1320 ad. 1358 WRSP 5 P. Phil 1515 3 100 1530 .cc To East WBSP 1539 al -following: I w/white rump, rest dark 16 20 BFA 43 1630 5/5/ light underwing NE 1632 Sm. Pterod. - very light underwing. N 1635 huge Seal with prominent crown (-1643 5/51 NE 34-12 -126-13 SI-MNH-958-e Rev. 5-66

		ET.				OB	SERVERS:
Shi:	p rection				DIV	ONIAN INSTITUTION ISION OF BIRDS EA DAILY LOG - E	Date 2: Apr 67 Pg.# 3
	TIME	SPECIES		DIR.		. REMARKS	
	1720 1724 1726 1728 1730 1754 1755 1805 1816	Ptero. sp. P. coolie WRSP WRSP S/Sb WRSP BFA WRSP WRSP	2 / / / / / / / / / / / / / / / / / / /	SSNOONN CORK		- madein sign, distant  Following I with a bite page  SUNSET close colse	enutuin
							SI-MNH-958-6 Rev. 5-66

ET			OBS	SERVERS:
Ship Direction			DS	Date 20 APRIL 1967 Pg.#
TIME SPECIES	# DIR	or BAND NO. REMARKS		
TIME SPECIES  2000 2250 2350 URSP  0000			in olo.	
				SI-MNH-958-6 Rev. 5-66

**OBSERVERS:** SMITHSONIAN INSTITUTION DIVISION OF BIRDS Ship AT SEA DAILY LOG - E Direction Date 2/ April 47
Pg.# SPECIMEN or DIR. BAND NO. REMARKS SPECIES TIME - Sunine fregion at sentiais 6537 0538 BFA - Following No white vary 0615 5/56 N NE WRSP 07.63 5 1511hen wholes 4 1/args bull 20 ft 10mg er 6703 H. Gwll 0718 Ad Following CRE 0725 BFH 2 sec. Follown I with white vogs 0129 BFA al-WBSP 0730 La 5 0750 BFA I w/white rump. (mottled), I w/injured leg a WRSP 0805 - probably some as 0718, but has not been HG 0840 present for 45 minutes. 0903 5/50 1007 - Soul small, long light reloved wisters, (Notown 3ft long)
34-12 122-24 1028 WBSP Cec 042 11 N 1044 W. Gull SW 1046 R. Phul COIL TIZ NE 1056 BFA Ce Following (I w/mottled white rump, I w/injured leg) Shorebird sp. 1110 distant 1015 WRSP 5 sitting on HZO Black Belly 2 1428 4 5 Ployer. 1443 Storm Per M 145 WRSP **3** (other?) 1153 5/53 M both light ph.; I long-tail; flushed from H20 to N; long-tail gaves 5-7 second charle to 2 2 ml JACUER 1207 1215 WR5P 0 WRSP 1216 0 WRSP 1220 0 1305 Sobine Galls. 2 on Had Ad Cer 1337 Storm Pot cec 1340 WRSP 14 1342 R Phal on H20 1342 WZSP SE 1353 WRSP on H20; 2 appeared to have dark rumps GO 1404 WRSP Stampet SI-MNH-958-e Rev. 5-66

SMITHSONIAN INSTITUTION DIVISION OF BIRDS AT SEA DAILY LOG - E  SPECIMEN  TIME SPECIES # DIR. BAND NO. REMARKS  INII RP 1 SW high (150')  1431 RP 2 On H2O - Arrive point D. 1515 1520 BFA 1533 RED PANL 2 5 1645 W 858 1 1655 W 858 1 1655 W 858 1 1655 W 858 1 1655 W 858 1 1657 BFA 1658 W 858 1 1658 BFA 1659 BFA 1650 BFA 1650 BFA 1650 BFA 1650 W 858 1 1651 BFA 1652 W 858 1 1653 BFA 1653 BFA 1655 W 858 1 1655 BFA 1655 W 858 1 1657 BFA 1658 W 858 1
DIVISION OF BIRDS AT SEA DAILY LOG - E  Date 21 Apr 167 Pg. # 2  Date 21 Apr 167 Pg. # 2  TIME SPECIES # DIR. BAND NO. REMARKS  IMII RP I SW high (150')  IMIS WRSP I GOD - on H2O ISSO WRSP I GOD - on H2O ISSO BFA 5 SKIFF IN ISSO BFA 5 SKIFF IN ISSO JACCER 2 SKIFF IN ISSO WRSP I GOD - on H2O ISSO JACCER 2 SKIFF IN ISSO WRSP I GOD - on H2O ISSO W
Direction  Direction  SPECIMEN  OT  TIME SPECIES # DIR. BAND NO. REMARKS  INII RP  1431 RP  1431 RP  1431 RP  1435 WRSP  1450 Fropic AP  1550 JACLER 2  1545 NSSP  1550 JACLER 2  1545 WSSP  1645 WSSP  1645 WSSP  1655 WSSP  1656 WSSP  1657 WSSP  1658 WSSP
Ship Direction  SPECIMEN  SPECIMEN  Or  TIME SPECIES # DIR. BAND NO. REMARKS  INII RP  1415 WRSP  1416 Tropic AR  1500  1515  1520  BFA  1553 RED PHAL  2  SKIFF IN  1645 WBSP  1645 WBSP  1655 W.Gall  3  CRE  1655 BFA  1656 BFA  1657 BFA  1657 BFA  1658 BFA
Direction    SPECIMEN   Date 21 Apr 167   Pg.# 2
TIME SPECIES # DIR. BAND NO. REMARKS    1411   RP
TIME SPECIES # DIR. BAND NO. REMARKS    MIII RP   SW   high (150')    HIS WESP   ODD     STOPIC AR   ODD     STIF   OD
1415 WRSP I OD on H2O 1431 RP Z ON H2O 1446 Tropic. AP I OD Arrive point D. 1515 1520 BFA 5 All Widank rump, one whinjured leg 1545 1550 JAELER 2 SKIFF IN 1553 RED PHAL 2 5 1645 WBSP I GE 1655 W.Gall 3 GE I Call TVZ 2 h.that flux away Adults 1657 BFA IR WIGHT TO Z 2 h.that flux away Adults 1657 BFA IR WIGHT TO Z 2 h.that flux away Adults 1658 BFA IR WIGHT TO Z 2 h.that flux away Adults 1658 BFA IR WIGHT TO Z 2 h.that flux away Adults 1659 BFA IR WIGHT TO Z 2 h.that flux away Adults 1755 BFA IR WIGHT TO Z 2 h.that flux away Adults 1755 BFA IR WIGHT TO Z 2 h.that flux away Adults 1836 Tim ruptual plumage, rus hall way.
1431 RP 2 on H20 1446 Tropic, AP 1 on H20 1500 1515 1520 BFA 5 skiff creen 1545 1550 JAEGER 2 SKIFF IN 1553 RED PHAL 2 5 1645 WBSP 1 Re 1655 W.Gull 3 cee 1 coll TVZ 2 h,that fluxaway Adults 1657 BFA 18 ce Followin 1657 BFA 18 ce Followin 1658 BFA 18 ce Followin 1658 BFA 18 ce Followin 1659 BFA 18 ce Followin 15 #w Following -1 w/injered leq. 1836 7 in replical plumage, red hall way.
1431 RP 1435 WRSP 1 GD  1446 Tropic AP 1 Fropic AP 1 Fropic AP 1550  1555 BFA 1553 RED PHAL 2 S 1645 WRSP 1 GE 1655 W.Gall 3 GE 1655 W.Gall 3 GE 1657 BFA 18 GA 1836  1836  1836  Tins Red Phal 4 GA  Fellowin  Fellowin  Fellowin  Fellowin  Fellowin  Tins Red  Tins Red
1435 WRSP 1 COD  1500  Arrive point D.  1515  1520 BFA 5 SKIFF IN  1550 JAELER 2 SKIFF IN  1553 RED PHAL 2 S  1645 WBSP 1 Re  1655 W.Gull 3 CR. 1 Coll TIZ 2 h.t hat flux away Adults  1657 BFA 18 CM Followin  1822 Should 15 #W Fellowing - 1 W/ injured leg.  7 in nuplual plumage, Med hall way.
1515 1520 BFA 5  SK If Cruery 1545 1550 SAEGER 2  1553 RED PHAL 2  5  1645 WBSP 1  1655 W.Gull 3  Cee  1 Coll Tot 2 Lith of flux away Adults  1657 BFA 18 Correct  1836  R22 Should 15  WW  Tin ruptual plumage, rus half way.
1515 1520 BFA 5  SK If Cruery 1545 1550 SAEGER 2  1553 RED PHAL 2  5  1645 WBSP 1  1655 W.Gull 3  Cee  1 Coll Tot 2 Lith of flux away Adults  1657 BFA 18 Correct  1836  R22 Should 15  WW  Tin ruptual plumage, rus half way.
1545 1550 JAEGER 2 1545 1550 JAEGER 2 1553 RED PHAL 2 5 Ilight (Powering), one whinjured leg 1545 W BSP 1 1645 W BSP 1 1655 W.Gall 3 1657 1655 BFA 18 W Followin 1755 BFA 18 W Followin 1822 BAPHAL 4 Tinseptual plumage, red hall way.
1545 1550 5A66-ER 2 5KIFF IN 1553 RED PHAL 2 5 1 light (Pomarius), I dank (?), fleshal from H20 1645 WBSP 1 Cel 1772 2 hit hat flow away Adults 1657 BFA 18 Cor Followin 1836 7 in neptual plumage, Neb hall way.
1550 JAEGER 2 1553 RED PHAL 2 5 1645 WBSP 1 0ee 1 Coll Tot 2 hit hat fluraway Adults 1657 BFA 18 Cor Followin 1836 Tin Sephal 4 1836 Tin neptual plumage, red hall way.
1553 RED PHAL. 2 5 1645 WRSP 1 Qe 1655 W.Gull 3 Cee 1 Coll TVZ 2 h.t hat flow away Adults 1657 BFA 18 Cor Followin 1822 Showbord 15 #W Telewing -1 W/injored leg. 1836 Tim ruplual plumage, rust half ways.
1645 WBSP 1 Qe 1 Coll TVZ 2 hit hat fluraway Adults 1657 BFA 18 Cm Followin  1822 Shoulderd 15 #W Televing -1 W/Injored leg.  1836 Tin neptual plumage, red hallway.
1657 BFA 18 (a Following - 1 W/injered leq.  1836 Tim ruptual plumage, rus half way.
1836 BFA  18 W Following -1 W/injered leg.  7 in neptual plumage, rus half way.
1836 B F A  1836 B F A  1836 Tin ruptual plumage, rus hall way.
1822 Browlinds 15 #w Telewing -1 w/injered leg. 7 in ruptual plumage, rus hall way.
1836 7 in ruptual plumage, rus half way.
Sinset, dore observations
Sinset, close observations
SI- MNH- 958-
Rev. 5-66

		W T					OBSERVERS:
Shij	p rection			_	DIVI AT SE SPECIMEN	ONIAN INSTITUTION ISION OF BIRDS EA DAILY LOG - E	Date 21 Apr 67 Pg.#
	TIME	SPECIES	#	DIR.	or BAND NO	. REMARKS	
	2045					- Begin	
	2215	BFA	1				
		SP	1				
	2215 -					- closa	
4:							
41							
			/				
		-					
•							
				E 10			SI-MNH-958-6
							Rev. 5-66

**OBSERVERS:** DIVISION OF BIRDS Ship AT SEA DAILY LOG - E Direction Date 22 APRIL 1967 GRID SPECIMEN Pg.# or DIR. BAND NO. REMARKS SPECIES TIME SR j begin ols. 0537. WRSP 0615 0 BFA 0640 R Phal. 0647 white rump, following one with white rumps 0707 BFA 0757 0842 B Phul 18 - 1 Breeding Plumase 0852 # 5 Pet. 900 30 25 R. Phal 0910 0920 0940 - change course to 090; heading for WRSP 2 1045 6 port for repair. Rphal 1159 on 4,0 Sm. Pterod. 1214 (0) light underwing, distinct "m" pattern on wing, Probably P. cookii. WRSP 1220 2 (000) 1235 R. Phal 3 on H20 1238 WRSP 000 Baird & Porpoise - 2 + 33-20/ following. (white rump) 123-04/ 1245 BFA 1315 WRSP 1326 0 -> 1330-B. Phul Du WRSP 1510 200 1530 P. cookii ? 14 1531 BOWESP 000 100° 125 on Hill 1602 R.P. 1603 WRSP 163a WRSP 1651-WBSP lec 1735 1745 200150 on Hzo W' 1755 256±25 ua white below dar's above WRS Pot 1803 Cec Kanty Marlet 1 CV11 112 -on H20 al 1830 s Sperm Whole 3 1837 WRSP (00) 123-50 Iw/white rump / / 1840 BFA 3 Sunset - dose observation SI-MNH-958-e 1851 Rev. 5-66

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				SONIAN INSTITUTION	
Ship Direction		AT S	VISION OF BIRDS SEA DAILY LOG - E  N Nocturnal Guid	Date 22 April 67 Pg.#	
TIME	SPECIES	#	or DIR. BAND NO		16.11
204.	5			Begin Observations	
				,	
			·		
					SI-MNH-958-6 Rev. 5-66

- sparm whale - 1 breaching: ca. 3/4 of body came out of 1/20. \ 33-24 125-36/ close- very white underwing, con-color head & back, distinct 'w' pattern, White patches on dorsal surface of wing probably caused by molt. Flight distinctive - a cross tween pterodroma and p. puttinus. - same marks as 0752 except less white on upper wing R Phal distant, but brilliant white underway 0 827 0 Peters. op. 0836 distant; distant white patches on doisal surface of primarie 0 0859 Phat. op. 1027 SM. Pterodiana 00 1030 P. COOKII? on H20 1130 cleany course to 180 1222 B. Phul 600 on the o 1230 lee 1304 WRSP 24 1317 BFA 00 1344 WRSP (2) 1440 5/56 W 1450 BFA 0 400C43 1512 ar. 1600 WRSP 600 on H20 1615 WRSP on H20 P. COOKii? R. Phal. 1640 0 1700 CCTOE BFA 1705 Following 0 1827 WRST 1830 BFA 1850 Plano, Ap, 3 SUNGET, closedo, 859 SI-MNH-958-e Rev. 5-66

		ET						OBSERVERS:
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Shij	p				DIVI	SION OF BIRDS LA DAILY LOG - E		1000
DL	rection				SPECIMEN or	NOCTURNAL	GRID	Date 23 APRIL 1967 Pg.#
	TIME	SPECIES	#	DIR.	BAND NO	. REMARKS		
	2330-2355	BFA BIRD	1-			- bollowing - bollowing - cloop olo		
	0130					- close olo		
						,		
				,				
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								SI-MNH-958-e Rev. 5-66

**OBSERVERS:** SMITHSONIAN INSTITUTION DIVISION OF BIRDS Ship AT SEA DAILY LOG - E Direction Date 24 Apr. 1 67
Pg.# SPECIMEN or DIR. BAND NO. REMARKS TIME SPECIES 0529 - sunvisin beginalsonnetoric WRSP 0607 al 0635 BFA Following 0700 WB5P Ca P. Cooksi? 0718 con colon hand & Back, district fairly wide to buck W 0725 & Phul bonderon wing whote below. w Storm Pet 0830 and o 0843 WRSP B 1015 . 1058 B. Phul N Baird & Dolphin 3 - 32-27 . 1102 Little Bird @2 1105 Barro 1131 WRSP 00 1140 WRSP 00 1152 WIZSP (000) - both w/dark rump. In. 11.52 BFX 1233 PTERO.SP. N 1245 WRSP 1 0 1255 - KILLER WHALE (1) - 32-26 1315 R Phul cer 1333 122-53 on #20 ar 1350 WRSP 1432 R. Phal. ontro 1442 000 R. Plat. 1547 X 1620 ae 1637 R. Phal Follow ing, very light pink self. 1730 Laysan Alb. BF.A R. Phal S 1732 R Phal 1739 man-o-war jelly tish getting thicker 1745 Phal. sp. 1800 1600 from H20 south BIRD 1813 0 WRSP 815 0 BFA 830 1836 LAYSAN BFA 1840 LAYSAN Rev. 5-66

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Ship Directi TIME	on	# D	DIVI AT SI	ONIAN INSTITUTION ISION OF BIRDS EA DAILY LOG - E  //octurnal Grid. REMARKS	Date 24 Apr 67 Pg.#		
-0440				- begin.			
					SI-MNH-958-6 Rev. 5-66		

**OBSERVERS:** SMITHSONIAN INSTITUTION DIVISION OF BIRDS Ship AT SEA DAILY LOG - E Direction Date a5 APRIL 1967 SPECIMEN DIURNAL NON-GRID Pg.# or TIME SPECIES DIR. BAND NO. REMARKS SUNRISE . BEGIN OBS. 0520 0540 BFA Following. œ Laysan H a 0550 BFA ", all w/dark rump. 0600 BFA " one w/ down white rump, 5 0609 Gull Ap. -not well seen; small with distinct white areas in wing: No other field marks seen. 2610 seal 5p. - 32-42 119-55 0624 BFA 8 - light underwing 0730 5/5/ 00 0731 5/5/ 6 00 0732 5/5/ 00 0736 BF8 Follow 0736 W. 6011 8737 5/5/ 2000 - light underw. 0744 5/5L 6 0 light underwings 0745 5/5/ 0 0747 5/51 (000 0750 primary molt, light underwing E 0755 cee. 7757 Salinos Gull 0759 cae 5/5/ E Blue-footed 0800 Booky 4000 look close -COR 0805 5/51 E 0807 11 E 0810 11 8 a 0812 11 5 E 32-50 119-35/ 58/2 11 E 0816 20 Seperate Sightings Heavy Moltin primavies E 11 0917 E 1820 30±5 11 西河 0920 11 23 3921 11 y 0824 11 SI-MNH-958-e Rev. 5-66

		1				OBSERVERS:
					CMT TUCONT A N T NOTE TO THE ON	
		$\overline{}$			SMITHSONIAN INSTITUTION DIVISION OF BIRDS	
Shi					AT SEA DAILY LOG - E	
DI	rectio	n /			SPECIMEN	Date 25 April
					or	Pg.#
	TIME	SPECIES	#	DIR	BAND NO. REMARKS	
	0826	S/SL	6	E		
On house	0827	Gul1 50	/	E	I mm	
	0928	(1-)			5 pern what 1 3	2-49 119-31
	0130	5/56	Gotio	<b>E</b>		
	0831	11	13	E		
	0833	L.T. Jager		5-	T = II	
	0834	P. creatur's	,	cae	Toward large flocky	15/56
	0831	N. Pherl	7	are	onthere	
	0839	5/56	4	E	I will all	
	0941	5/52	41	E		
	0842	5/52	4	E		
•	0845	11	150125			
	0850	6 A	2	cer	- Following ship	
	0951	5/54	Sotio	5.7	Seal 77	46 119-25
	0853	R. Audslet	2	ce -		46 119-25
	0855	Gullsp		-	mon Ha G	
:	0857				Im Follow	
	0859	5/56	200 12	5 cee	2 earl (2) Sur 11	32-45 119-23
	3904	5/54	100123	al	5 15 pind of Hours SE	
	0915	· ·	60-10	0		
F			100726		200	
•	0 7 0.	P. Gengter		10	Johnson	
		Pom. Jacque	1	00 -	Les from Ha O	
-	0921-				sefection.	1
- 3,	095	5/-1	11. +-		Dall Porposed (	5); reding love wave
~	0927	5/56	40-5	0		
		5/5/5	206-125	6	- seal 4p 32-47	32-46 119-20
	8 928	Puit 700t	4		119-19	
	0930	Pom. Jacos	7	N-	lylet pl.	
	0931	TORN SP.	2	N	Tierre et	
	0932	GULL SP.	2	<b>6</b>		
	0933	Jacqurop.	1	10-	doct destant	
	0934	Pink Fot	2	0		
	6935	5/5ls	150 ±20	0		
ds.	0936	Pink Fort	2	N _	dank	
	0937	R.P.bal.	50:10		from H20 E	SI-MNH-958-
	170	5/5lr	20.70	0		Rev. 5-66

		- F					OBSERVERS:	
					SMITHS	SONIAN INSTITUTION		
Shi	p					VISION OF BIRDS SEA DAILY LOG - E		
Di	rectio	n /					4.0	25 APRIL 1967
		1			SPECIMEI or	IV	Pg.#	3
	TIME	SPECIES	#	DIR.	BAND NO	O. REMARKS		
	0941	Junga sp.	2	E-		- Ilight , I dank		
	0946	Pom. Juga	)	E-		BEAUTIFUL, PRISTIN - up from H20 follow IMM.; distant	IE LICHT Ph	
	0947	H. GULL. SP.	2 -	9-		- up from Hoo follow	wing	
	0948	5/54	30 ± 5	0		- /mm. ditant		
	0950	H G411	1 -			A		
The same of the sa	0957	Jacque	50110	0		- adi; up from H20, 4	golden -	32-49
			13 —			aver I whale on Hy	2 Soul ul Pon	-A3119-14
	1010	Bala foot	1	2		desting about porpose	ne (2)/ 21)	neg c r
		Sooty	3			ave I whole on Hy	( ) ( op ! ) no	me Sanlay on 1720
		Cal. Gull W. Gull	1					241
· Marine	1010.		,			- Hubb's beaked who	le - well viewe	6 off
						Side of Ship. Four	Voke & Sunface	White
						THE STATE OF THE S		(1)
	1010	Pom J.				ca. 15' long.  close: light	32-50	•
		5/5/	6	(36)			119	-20
		Jacq. Ap	)					
	1020	Sabine G.	3	N		- Iw/black had		
	1022	Pink-foot Pom J.	\	00				
	1024	Sabine G	,	0				
	1029	5/5/	9 _	N		- black head - on 1+20		
	1030	Pom J	1	11		Lark		
	1036	w. oull	2	20		dark on H20		
	103 4	5/5/		8		ial, imm		
•	1044	P. creotopus	19				-32-52	119-06
		Soct/s1	24 3	-		-on Hro		
	1050	S/S/	4	ea		- cal sea lim 2		
	1050	Joeg. Ap	1	0				
	1084	5/51 Pink-foot	35=5	5-		-on Hro		119-05
No.	-	Fink-toot	20±5.			- Seals (cal sea L.	2) - 32-5	3
	1055	H.G.	1 -			- Imm.		
	1056	5/5/	8 -			on Ho		
		Pink-foot	4			1/20		
	1088	W Gull	4-			- 3 cmm, 1 al		
	00	punt for	- 1					SI-MNH-958-6 Rev. 5-66
								T/C A " 7 - 0 0

					OBSERVERS:
Ship Direction	on .			SMITHSONIAN INSTITUTION  DIVISION OF BIRDS  AT SEA DAILY LOG - E  SPECIMEN	Date 25 Apr Pg.#
TIME	SPECIES	#	DIR.	BAND NO. REMARKS	
1100 1102 1103 1103 1113 1117 1117 1127 1129 1130	Pom 5 5/5/ 5/5/ 5/5/ Facy Ap 5/5/ Pom Jungar 5/5/ Pinis And 6/6/ Pinis And 6/6/ Pinis And 6/6/ Pinis Font 6/6/ Pinis Font 6/6/ Pinis Font 5/5/ Pinis Font 5/5/ Finis Font 5/5/ Finis Font 5/5/ Finis Font 5/5/ Finis Font 5/5/ 5/5/ Finis Font 5/5/	5ute	NO DE TO CHE OF NONE	- light  on H20  on H20  on H20  francing such to dime under for 40,55ec.  on H20  on H20  on H20  on H20  on H20  on H20	b practs water - was and s while P Tagen realited where
1222 1235 1244 1245 1250 1251 1350 1310 1315 1315	CORMONAT  CAL. GULL  POM. JAEGER  S/S/S  II  II  GULL SP.  II  CORMORANT  PINK-FOOT  GUIL AP  W. Gull  PINK FOOT  S/S/  PINK-FOOT  Pelagic Com.	4/21/11/21/11/43599123	NE au EN 5555EN OD	Imm. following light ph.  Imm.  ado. sitting on H20  - flushed from H20  - ivin, distant  ad on H20  - on H20  on H20  linum	SI- MNH-958-e
					Rev. 5-66

			5		OBSERVERS:
Ship Direct	ion		DIV	ONIAN INSTITUTION ISION OF BIRDS EA DAILY LOG - E	Date 25 Apr '67 Pg.# 6
TIM			IR. BAND NO	. REMARKS	
163	Bonap. Gull 5/5/ 5/5/ 1 W. Gull 52 Cal Gull 68 W Gull 4 (ul Gull 6 (ul Gull 6 (ul Gull	23 N. C. N.	Nu De 3.	- travelling Flock adults  - white underwing  I mum  ad on the O  Ad  Ad - following  Ad olose absenced.	
	40				SI-MNH-958-6 Rev. 5-66

₹	
Date 16 Are 1467	Ship Justice (TAG 37) Cruise No. 177-17
Organization P.O.B.S.P.	Recorder
Sunrise: Time	Position: Lat, Long
Sunset: Time 1828	Position: Lat. 33°58', Long. 118'57'
Miles travelled from 0000	hours to sunrise =
*Miles travelled from sunr	ise to sunset =
Miles travelled from suns	et to 2400 hours =
TIME OF FIX TYPE	OF FIX LATITUDE LONGITUDE
1. Departure Los. Angle.	s. 1480 hrs. 33 H) N
2. Hourly Fixes By LAN	d Bearing >. 118 4 15 W
3.	
4.	3 7
5.	
Hourly Positions:	
Time Latitude Longit	ude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.
0100 0200 03.00	

(		***************************************		and the second s		
0100						
0200						
03 00						
0400						
0500 0600						
0600						
0700						
0800						
0900						
1000						
1100						
1200						
1300						
1400	33 42 4	118015'W				
1500	No E WEEE	1180181 W				
1600	33 44.1	118-28W	190	1 4	190	3
1700	330 1000	114-40W	20	/ /	7	Ú
1800	33°54N	(18-1052)	210	10	15	٠, ١
1900	30 57 N	118 57813	-5.00 g	0	21/0	4
2000	3400000	119-07W	DV.	5	240	12
2100	34-08W	119.21 W	270	10	270	3
2200	34 100	119-32W	270	10	270	3
23 00	34 13.5W	119-345 W	270	10	270	3
2400	34-16	119-54.5W	270	10	270	J

Date	19	APR-	6.7
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Shipster (T-AG-177) Cruise No. 177-67-06

Organization	P.O.	3.5.	P.
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Recorder

Sunrise: Time 0529 Position: Lat. 34 35 V, Long. 120055 W

Sunset: Time 1848 Position: Lat. 34058W, Long. 123'11'W

Miles travelled from 0000 hours to sunrise = 52

Miles travelled from sunrise to sunset = ///

Miles travelled from sunset to 2400 hours = 55 miles

LATITUDE TIME OF FIX TYPE OF FIX 1. LAN. & LORAN & SUN

2. 1400 LORANT SYN

3. 1900 STAR FIX

4. Hourly Loren Line.

5.

LONGITUDE

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt	•
0100	34-19	123-13	<i>و</i> ر - ۰	12	290	4	
0200	32000	1 de ==	2 , 3	15	290	0/	
03 00	34-24	170 30	1 - 7	15	2.40	4	
0400	34027'N	1200 20' M	270	15	290	U	
0500	340 710N	1201491W	2	12-	2:0	4	
0600	340 35 N	121-00 W	240	1 3-	270	4	
0700	340 39'N	12/11/11	2:5	14	200	Ω	
0800	340 021	121- 17 119	205	14	210	3	10 Fost LNW LY Shells
0900	34-47W	121. 28 W	270	10	270	2	
1000	34 51 W	121-38W	270	10	270	?	
1100	34 54W	121-46W	270	10	270	4	
1200	34-55 N	12-1- 57-W	270	10	270	4	
1300	14 59 N	111-10W	275	17-	275	4	1240- ARKIVED
1400	34-5611	127-21 2	275	1 )	7-15	Lf-	PT. ASh-Course
1500	34-59N	122-429	275	12	300	12 (50)	
1600	122-42	122-321	280	250 10	-300	12 (5.0)	
1700	37-1-611	1220 50°W	300	12	71	4	
1800	34 511	1230 04 60	325	7	J / T	4	
1900	340 55' N	123º 1//W	300	5	315		
2000	34 55 V	1330 24 W	2 5		7/5	2-	-8 FT Swell-300
2100	34-58N	123.39W	LT. AIRS		caem		(
2200	34-58N	123-51W	LT. AIRS		CALM		
2300	34-58N	124-04.0	LT. AIRS		CALK		
2400	34-58N	124-16W	LT. AIRS		CALM		958b-SI-MNH

Rev. 9/28/66

Date 20 1/1 1967	Date	20	VIPIL 1	1967
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Ship (14.177) Cruise No. 177-67-06

Organization P.O.P.S.P. Recorder

Sunrise: Time 0548 Position: Lat. 35002'N, Long. 125 22 W

Sunset: Time 1858 Position: Lat. 341211, Long. 125048 W

Miles travelled from 0000 hours to sunrise = 55

Miles travelled from sunrise to sunset =  $\frac{1}{2}$ 

Miles travelled from sunset to 2400 hours = 5.5

	TIME OF FIX	TYPE OF FIX	LATITUDE	LONGITUDE	
1.	0530	LOCAL STAR	50,2 V	125019 11	
			~ .~ .		

2. 0703 R, Fix JJ' 3 N . 25 N

3. NOON FIX LORAN & SAN LINE, RETARD LAN.

4.

5.

Time

Hourly Positions:

							general control of the control of th
0100	35-20 1	1-20 LW	260	5	200	C-61-9	
0200	35 20 11	124-37 W	LT - 6 - 5			11	& WHULLY SUFT
03 00	3 00 4	124-50 W	28-	5	280	11	E FT
0400	35001 N	155003'W	20	7	2 40	3	
0500	350 021N	125015'W	390	7	28-1	7,	
0600	31-0 55'N	1250 20 W	290	7	280	7	
0700	350 051N	12503511	LIA	R C	280	1	
0800	3+0 01: NI	1250 50° W	LY. AIR	2	2 50		
0900	35-00 N	126.036	295	12	295	3	
1000	35-00 N	126.76 W	291	12	295	3	1004 % 192
1100	34-49N	126-210	300	18	295	5	
1200	34-39 N	126-21W	300	20	295	5	
1300	34-35 4	176 17.00	293	17	290	5	
1400	34300	116 23 W	280	15	283	45	
1500	34-20 N	125-28 W	280	15	280	5	= 1530 c/c 092
1600	34-134	126-20/w	280	15	. 280	5	
1700	34-12N	126-1112	220	12	2(2	4	
1800	14-12 N	125 15W	.5 7	10	280	3	
1900	34-12N	135- K7 W	260	1/3	360	2	
2000	34 11N	135-35W	260	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	240	2	
2100	34-10 N	125-200	280	16	280	4	
2200	34-10 N	125- 08W	280	16	280	6	
2300	34-10 N	127-52W	280	16	280	6	
2400	34-10 N	124- 41 W	280	16	280	6	958b_ST_MNH

Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.

Date	21	11,2,2	67

Shin	LUNTER	(T12177)
DITTA		11-14/2

Cruise No. 117 5/ 76

Organization Recorder

Sunrise: Time 0507 Position: Lat. J40131 Long. 1930 21 W

Sunset: Time 1839 Position: Lat. 330 38 N Long. 12102 W

Miles travelled from 0000 hours to sunrise = 53

Miles travelled from sunrise to sunset = / /

Miles travelled from sunset to 2400 hours = 55

TIME OF FIX TYPE OF FIX LATITUDE

LONGITUDE

0500 CENAL 1.

2. Hounty sun lines with Loran

3. LA REDICED NE WOLDS.

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hgt	
0100	34-08N	24-2: W	275	30	275	6	1
0200	34-25	124-10W	265	15	265		
03 00	3 /	123-500	280	15	26	5	
0400	340 13'N	1530 AD.M.	280	14	265	3	
0500	340 13 N	1330 59161	250	14	265		
0600	34 13 11	123" 14' W	5 °4-71	4	265		
0700	74 12 N	12 112 W	5 50	14	285	H	
0800	34 12 11	132" 51'W	261	15	285	4	
0900	34122	122 38 W	215	14	215	4	
1000	34 12~	122 25 W	275	14	275	4	
1100	34 11 N	122-15 W	275	14	275	5	
1200	31-10 M	122- 02-2	275	14	275	5	
1300	34-114	121-48 W	270	12	270	6	
1400	31-	121-31W	265	12	165	3.7	
1500	24 1214	121-200	25	1	7 30	E	c/-
1600	34-01N	12 - 20 W	245	1-2-	1 1 5	6	
1700	33-45.0	131-2141	21.4	12-	240	٢/	
1800	330 401 N	121-2211	27)	15	241	1	
1900	37 W	121- 304	240	18	2 / /	~ ,	
2000	3 0 V	131, 12 2	210	10	240		ck 10 270
2100	35-22 1	121-40 W	272	16	272	ef	
2200	33-1 N	121-52 W	27-3	16	170	Y	
2300	33-77 N	122-03 4	7 1 3	16-	/ / /		
2400	33-20 N	122-11/	7 1 3	1 -2	>		958 <del>b</del> -SI

Date_	22	Flore	6	

Ship Jugar	ell til	(T-16-171)

Cruise No. 177-67-6

Organization Recorder

Sunrise: Time 6536

Position: Lat. 33" W, Long. 12" W

Sunset: Time / 85 /

Position: Lat. 33 22'N, Long. / 54'

Miles travelled from 0000 hours to sunrise = 44

Miles travelled from sunrise to sunset

Miles travelled from sunset to 2400 hours = 45

TIME OF FIX TYPE OF FIX LATITUDE LONGITUDE

1. HOURLY FIX DURING MIGHT, LORAN RATES 2HI & 2HZ

2. 6500 CELESTIAL 33°25'N 122°58'W

3. 1207 LA 1-1200 ENLY WE

4. 1000 11/20-1500 Some = - 1500 Januarie - 242 Levelet

5. 1900 CELESTIALULINAN 33022'N 123055 W

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Hg	t.
0100	33-19 N	122-23 w	280	12	280	* 7	JE CU11314 = 1)
0200	33-19 N	122-33 W	250	16	280	* 8	5=14 8561=16
03 00	33-18 N	121-42 w	280	15	280	* 17	
0400	33-17 H	122 50 W	250	15	2とし	the C	
0500	33075'V	122058'W	300	1 1	29.	5-	
0600	32 25 N	133 07 W	370	15	290	1	6 10=12 W
0700	33 25 N	133012, M	330	15	290	U	J SEVELL
0800	37 24 N	153 22w	320	15	201		
0900	33-23	123-300	300	14	300	6	
1000	33-21	123-37 N	300	14	300	ю	
1100	33-21	123-22W	300	14	300	6	0941-13==
1200	33-7-0 N	1232-102	270	15	, -1 >	5	an 08
1300	3-201	123-01-	280	10	2-54	*_	
1400	33-2214	123-150	300	.10	j≈ 13	for	12 12 15
1500	50	123-166	270	5	2 2 3	ر	RESI HE GREID
1600	23-2011	173-76 W	LTH	2000 1900 - Land	1610110	ES	Assum01330
1700	33-3-0	123-37W	276	10	278	.7	
1800	37	1. 44 W	220	//0	202	200	
1900	33-72	127-5511	215	10	2 -		
2000	77- 57	131 860	205	12/	2-20	J	
2100	33-21	124-17 W	2255	14	215	4	
2200	33.21	124-28w	225	14	215	Y	
2300	33-21	124-38W	215	18	215	5	
2400	33-21	124-47 W	215	20	215	-	9584-ST-MNH

958b-SI-MNH Rev. 9/28/66

Date 25 Ship Date (T. 11617.) Cruise No. 127-67-21
Organization Recorder_
Sunrise: Time 0500 Position: Lat. 3000 V, Long. 12000 W
Sunset: Time Position: Lat. , Long.
Miles travelled from 0000 hours to sunrise = 47  Miles travelled from sunrise to sunset = 107 % Color of the sunset.  Miles travelled from sunset to 2400 hours =
TIME OF FIX TYPE OF FIX LATITUDE LONGITUDE
1. 0500 LEBERT 33: N 120107'W 2.
3.
<u>)</u> † .
5.
Hourly Positions:
Time Latitude Longitude Wind Dir. Wind Sp. Wave Dir. Wave Hgt.
0100 2 126-52 315 72 31

						1,54,5
0100	i.	1200-500	315	72	3.10	10
0200	322 321	1-c - 1/4/11	300	2	<b>^</b>	10
03 00	32 -	Ne die	4 -	2/	3,2-15	12
0400	2213 N	120 18 20		オー	325	10
0500	32" 17' N	1200031W	315	25	335	10
0600	321 11 N	119457 61	1,5	25	725	
0700	35°41'N	1130 46 h			Ó	10
0800	3505-11 N	113 7	The state of	25	7.5 -	10
0900	1	11 9 = 23 ==	3 /5	·	324	13
1000	11 4 F N		315	b.	8-205	10
1100	37 - 1 = N	119 24	S i	2- 2	2 •	7.3
1200	32-56-4	115-35-24	3 1	42	2. 2	10
1300	25-55	112-512	315	-20	22:	1.0
1400	33 51 1	118=42	310	1.5	<i>3</i>	3
1500	34-17 4	116-15	300	16	300	4
1600	33-13-V	118-1: 11	295		795	
1700	- 10	115	300	10	3	1
1800	3. 2. W	1180 14 11	35-1	11	290	,
1900	.75	170, Emile	A SEA S	200		
2000						
2100						
2200						
2300						
2400						

4 Cho . el de

13/72

Date Ship (	Cruise No. / / / / / / / / / / / / / / / / / / /
Organization P.O. P. Recorder Share	· · · · · · · · · · · · · · · · · · ·
Sunrise: Time 0529 Position: Lat.  Sunset: Time 1844 Position: Lat.	
Miles travelled from 0000 hours to sunrise =  Miles travelled from sunrise to sunset =  Miles travelled from sunset to 2400 hours =	114
TIME OF FIX TYPE OF FIX LATITUDE  1. LUMAN N 39635  2. Noo, 95777 LN 12 2075	19313' W
3. 19 TO CEETTHE 35'5'	* Layout & grand of a Hole in
5.  Hourly Positions:  Time Latitude Longitude Wind Dir. Wind	Sp. Wave Dir. Wave Hgt.
0100 32 0 1/ 1/2 3 2 1 15	6-

				de la companya de la			
0100	2 0 N	12 = - 61 1		18	300	4-	
0200	32.	124		17	3-1	(4)	
03 00	7,70	124-35~	333	17	300	6	
0400	2.1	124-73-	333	17	200	6	1
0500	72 282	124-11W	330	14	33-0		1
0600	75 - 61/	124-0100	730	14		-7	8
0700	303 V	1330 500	3-30	16	- ',	-/	0
0800	32021'N	330 42111	Su	112		· _/	1
0900	37. 57 N	123 27W	330	17	336	5	1
1000	32-27N	123 18W	330	17	330	6	C.
1100	32-27N	123-10W	330	17	330	4	
1200	100-25-11	17 3- 25, 20	ر ہے	1.5	3)0	(=	1
1300	6 4	17 1- 17- 2	م ک	) 7	350		the state of the s
1400	37 27 11	11.	350	1 7	300	I II	8
1500	39-271	122-31. ~	345	15	7300	6	12
1600	37 N	23	345	15	300	4	9
1700	7-3-3-1-V	100000		1	. 17		1
1800	: = 3 7 N	120 - 0.541	340	181	335	4	
1900	30-201	121. 5000	341	10		C	
2000	131311	121-390	311	110	JAF	6	187
2100	35-27 N	121: 31 W	340	68	340	1	DEPAN
2200	32-27N	121 - 21W	340	14	340	4	2
23 00	32-28 W	121 - 11 W	340	16	340	6	- ,
2400	32-2× N	121 - '000	340	16	340	6	-

Date 4/2-167 ShipShearwaier (TAG 177) Cruise No. 177-67-06

Sunrise: Time 0544 Position: Lat. 330 M Long. 135-30 W

Sunset: Time 1859 Position: Lat. 32027/1/, Long. 126 000

Miles travelled from 0000 hours to sunrise = \_\_\_\_\_

Organization P.O.B.S.P. Recorder ship's bridge

Miles travelled from sunrise to sunset = ///

Miles travelled from sunset to 2400 hours = 42

TIME OF FIX TYPE OF FIX LATITUDE LONGITUDE 1. 0530 CELLSTIAL +- 17 33°34 V 125° 28 W

2.

3. 19 NO COLETTAL 35007 N 125 U

4.

5.

Hourly Positions:

Time	Latitude	Longitude	Wind Dir.	Wind Sp.	Wave Dir.	Wave Ha	st.
0100	332	11-17-1	270	15	270	5	
0200	332m N	1,5-7.	17 -	17	274	5	
03 00	33-20 N	14 13 12	2-7-	10	2.76	5	
0400	33'23'N	125015'W	270	17	270	5	
0500	7715411	125340	250	17	270	S	
0600	33 21 1	125 34W	331	15	270		
0700	13 21'N	4/10	250	12	270	5	
0800	73023'N	1250 57 W	270	15-	260	5	
0900	33 - 22 N	126-01 W	295	18	250	6	
1000	33 21 W	126-11W	295	18	290	6	
1100	33-20 N	126-17W	295	25	29'0	ь	)
1200	33 10	1:20-25 W	300	15	300	8	
1300	33 -21 N	11 - 13 W	300	17	3:0	8	
1400	32-574	10-22,4	300	15	300	5	
1500	37 - 46 11	1 / 1 000	3 2 13	15	300	<u></u>	
1600	14 6 11 2	111/25 0	23 a	15	133	8	
1700	35.3 N	136-5012	1	1-1-	31	3	
1800	35-29 N	126-11W	311-	161	78.87	V	
1900	3221N	125-5960	315	14	105 of 1	1	
2000	320371	131-5001	3241	1.4	•	3,	
2100	32.27	125- 37 W	332	14	330	4	
2200	32-27	125-26W	330	14	330	4	
2300	32-27	125- 15 W	330	14	330	4	-
2400	32-27	125-05W	330	14	336	4	}

× 11300/cTo 1800

PRELIMINARY REPORT

EASTERN AREA CRUISE 7 18-25 April 1967

including
EASTERN GRID SURVEY 6

Prepared by
Brian Harrington

This report is a summary of observations and collections made by P.O.B.S.P. personnel in the eastern Pacific Ocean from 18-25 April, 1967. Participating personnel included Brian Harrington (biologist-in-charge), Richard Heiden, and James Lewis. Superior cooperation was received from the officers and crew of the U.S.N.S. SHEARWATER (T-AG 177). The grid track was followed as accurately as circumstances would allow, but due to mechanical failures of the ship, was not completed. On 22 April deviations from the nominal cruise track were made between points E and F in order to made temporary engine repairs. Instead of continuing west, an, east course was taken from 0940 until 1330; at 1330 the course was once again reversed. Thus, a twenty mile portion of the track for the day was traveled three times. Observations over this transect will be discussed in the grid section of this report. Because of further problems with the main engine, none of the grid track between points H and O was surveyed. Instead a direct course to Long Beach was taken from point H ..

All positions on this cruise are considered accurate within five miles. Combined LORAN, sunlines and celestial fixes were taken hourly throughout the grid during diurnal hours; at night only LORAN was used.

This report is divided into two sections. The first deals with the grid portion of the cruise while the second covers the nongrid survey.

## EASTERN PACIFIC GRID SURVEY NUMBER 6

The eastern grid survey was conducted from 1240 hours 19 April through 2400 hours 24 April, 1967. Only about two thirds of the

nominal grid track was surveyed. A total of 72.2 hours of diurnal observation was conducted over 649 linear miles. A summary of observations may be found in table 1. An additional 12 hours of nocturnal observation were conducted and are summarized on table 5.

Weather data during the survey were recorded on appropriate forms. In general, winds and seas were moderate; a high pressure center to the north of the grid, and a low pressure center along the California coast influenced the weather throughout the survey. Sea state was not suitable for operation of the skiff, thus reducing collecting capabilities.

Twenty-seven bathythermograph casts were made in the grid. The slides will be sent to Scripp's Institution for analysis.

#### FLOCKING

As on previous cruises, flocking was not recorded in the grid except for resting groups of Storm Petrels and Bhalaropes. Flocking of these species will be discussed in the species accounts.

For purposes of discussion this report is divided into two sections. The first deals with the grid survey while the second summarizes the non-grid portion of the cruise.

#### GRID SPECIES ACCOUNTS

Black-footed Albatross (<u>Diomedea nigripes</u>) 35 + 4 nocturnal

Density in both the north and central sections was lower than that recorded on the last survey. East-west differences were not as marked as in early April, but were still evident.

An attempt was made to keep track of unusually marked individuals to determine how long they followed the ship. On 21 April two birds were followed closely; one followed about six hours and another for at least thirteen hours. On the 22nd another bird was recorded for more than ten hours.

The numbers of birds with dark upper tail coverts outnumbered those with white or mostly white by 5:1.

Laysan Albatross (Diomedea immutabilis) 1

One bird with an unusually pink bill was recorded in the eastern half of the central section.

Fulmar (Fulmarus glacialis) 0

This is the first eastern grid survey to date on which no Fulmar were seen.

Small Pterodroma (Not positively identified) 50

Judging by the field marks of the small Pterodroma which were well observed, it is felt that virtually all were <u>Pterodroma cookii</u>. Sightings were most common in the western half of the grid, especially on the north leg. Why an equal number was not seen to the south at equivalent longitudes is puzzling. A noticeable decline was recorded between points B and C; thereafter sightings were relatively scarce.

Most of those birds for which direction of travel was noted

were moving rapidly in a northerly direction. A few were seen sitting on the water, usually in the company of a few storm petrels.

Leach's Storm Petrel (Oceanodroma leucorhoa) 114 + 2 nocturnal Storm Petrel sp. (unidentified) 12 + 2 nocturnal

Probably all of the storm petrels seen on this survey were Leach's, but as similar types could easily be overlooked, they were recorded on the daily log sheets only as white-rumped storm petrels. The density distribution has changed since last cruise, but this behavior has been noted without explanation since January. The general trend of increase in the north section would seem to be indicative of a migratory movement, but no other data were collected which substantiates this. Direction of travel did not follow any obvious pattern, and the variation of local densities would not seem likely if a loose migration was under way.

Red-tailed Tropicbird (Phaethon rubricauda) 2

Both sightings were in the north section; neither bird was attracted to the ship, and in fact both seemed to avoid it.

Glaucous-winged Gull (Larus glaucescens) 0

This is the first grid survey to date on which no Glaucouswings were seen. The pattern of decline has closely followed that of the Herring Gull.

Herring Gull (Larus argentatus) 4

All sightings were of adults in the north section. The continuing decline of the grid population suggests that breeders are returning to the nesting islands.

These were the first sightings for this species in the grid.

All were adult birds, and two females collected had enlarged gonads.

Although the change of status within the grid does not seem large enough to be significant, it does seem possible that they were migrants based on data collected in the non-grid areas.

### Short-billed Gull (Larus canus)

The collection of this species constitutes the first grid record. The specimen was a subadult with light fat, and was in the northwest portion of the grid.

## Sabine's Gull (Xema sabini) 2

Two were seen in the northeast portion of the grid. All the sightings to date would suggest that along this portion of the coast this species is most apt to occur between 50 and 150 miles of the shoreline.

All of the grid jaeger sightings were in the eastern half of the north section where they have been frequently noted since January.

## Red Phalarope (Phalaropus fulicarius) 927 + 7 nocturnal

The densities of this species have been high and irregular over the last three cruises. During this survey unprecedented numbers were recorded, especially in the central portion of the grid. Their distribution seems to be very local, as was well demonstrated on 22 April. On this day a 20 mile portion of the cruise track was surveyed three times (see report introduction.) During these three transects virtually no Red Phalarope were seen. Yet just to the west (within 20 miles) hundreds were seen along a 20 mile line.

This instance, along with data from former surveys, suggests that the Red Phalarope abundance is quite local, but variable from one cruise to the next.

As weather was not suitable for collecting from the skiff, no specimens were taken in the grid. It was noted that about 20% of the birds appeared to be in complete nuptial plumage. The remaining were in winter or intermediate stages.

## Black-bellied Plover (Squatarola squatarola) 1

A single bird thought to be this species was seen in the northwest portion of the grid.

#### Xantus Murrelet (Endomychura hypoleuca) 2

Two birds were seen together in the eastern half of the central section. One male which was collected had small testes, moderate fat, and was in heavy body molt.

#### GRID MAMMALS

The numbers of mammals sighted in the survey area declined considerably from previous cruises. This, as emphasized in earlier reports, may have been due to the uncalm seas which were present throughout this survey. However, as no method of weighting is used to balance figures for sea state, all that can be said is that there may or may not have been more mammals than were sighted.

#### North Section

Otarids in the north section were represented by one unidentified sea lion and ten unidentified seals.

Cetaceans were scarce. Four Killer Whales and two Dall

Porpoise were all that were seen. The Dall Porpoise had not been recorded in the grid before this sighting.

#### Central Section

No seals were seen. Cetaceans included four Sperm Whales in the western half; in the eastern half one Killer Whale, five Baird's Dolphin and two unidentified dolphin were seen.

#### NON-GRID SURVEY

The non-grid phase of this cruise includes parts of three days of observations. Two periods were between Long Beach and point "A" of the grid, while one day was spent between point "H" and Long Beach. Both tracks were essentially the same as on previous trips.

On previous Eastern Area Cruises the non-grid portion has been analysed from the standpoint of the two cruise tracks. In this survey report an alternate treatment seems more meaningful. Instead of dividing by cruise track, this phase of the report is divided into those observations to seaward of the Channel Islands and those observations inside of the islands (see map 2). It is felt that this treatment is more meaningful when compared to the grid observations.

Flocking in the non-grid areas of this survey was a significant activity, especially in areas near Cortez and Turner Banks off San Clemente Island. This behavior will be discussed in the species accounts.

#### NON-GRID SPECIES ACCOUNTS

As none of the loons seen were well observed, no specific identifications were possible. All sightings were of migrants traveling north inside the Channel Islands.

#### Albatross

All but one of the fifteen black-footed Albatross seen were outside the islands. Two Laysan Albatross were seen near Cortez Banks.

## Shearwaters/Petrels

The only Fulmar sighting for the trip was a single bird near

the grid on the north track.

Sooty Shearwaters were present inside and outside of the Channel Islands, but were most abundant in the areas near the banks on the south track. Frequently mixed with the resting flocks of Sooty Shearwater were Pink-footed Shearwaters. The ratio of Sooties to Pink-foots was 9:1 inside the channel islands and 97:1 on the outside. As was noted last month, most of the shearwaters were in flocks sitiing on the water; frequently these flocks were around one or two feeding seals.

#### Pelicans, Cormorants, and Boobies

Brown Pelicans were seen inside the Channel Islands, especially near Catalina Island. Most were with groups of gulls sitting on the water.

A single Blue-footed Booby was seen near Cortez Banks.

Cormorants were seen only in small numbers, and all were inside the Channel Islands. Five were identified as Pelagic Cormorants.

### Black Brant

A single migrating flock of 18 was seen inside the Channel Islands.

#### Shorebirds

Non-grid shorebirds were seen almost entirely inside the islands. Northern Phalarope, a species new to the Eastern Area Cruises, were very abundant on the north leg. Most were in small flocks of less than 20 birds, but one flock of an estimated 1500 was well observed sitting on the water.

It is interesting to note that no Red Phalarope, inside the islands, and that no Northerns were seen far to sea.

Red Phalarope were seen outside the islands on the south track.

#### Jaegers and Skua

Two Skuas were seen on the north track; one was inside the islands, and one on the outside.

Pomarine Jaegers were abundant outside the Channel Islands on the south leg. Sixteen were identified, and most of the unidentified jaegers(17) were probably also Pomarines. On the north leg two unidentified Jaegers were seen outside the islands.

A single Long-tailed Jaeger was identified outside the islands on the south leg.

#### Gulls

The status inside and outside of the islands has changed considerably over the past month. On the inside of the islands 129 unidentified gulls were seen, only six of which were on the north leg. During earlier surveys hundreds of gulls were seen in the same areas.

Western Gulls were observed most commonly inside the Channel Islands. But when compared to other species of gulls they were proportionately more abundant on the outside. Also, in a proportionate sense, they were more abundant overall than they have been on previous cruises. Both adults and immatures were noted.

One Herring Gull was seen inside the islands; the remaining four were on the outside. The decrease of numbers correlates to the drop noted in the grid.

California gulls were the most abundant gull seen on the non-grid survey. A group of 130 was seen just off of Catalina Island; an estimated 90% of these were immature birds. On the north leg only one California Gull was seen.

One Ring-billed Gull was seen inside the islands on the north leg.

All sightings of Bonaparte's Gulls were inside the Channel Islands. One flock of 23 appeared to be migrating.

Sabine's Gulls were seen only outside the Channel Islands.

On the north leg a single bird was seen, while on the south leg six were recorded.

#### Terns

Three unidentified terns were seen on the south track. Two were outside the islands, and one was on the inside. In Long Beach Harbor both Forster's and Least Terns were seen.

#### Alcids

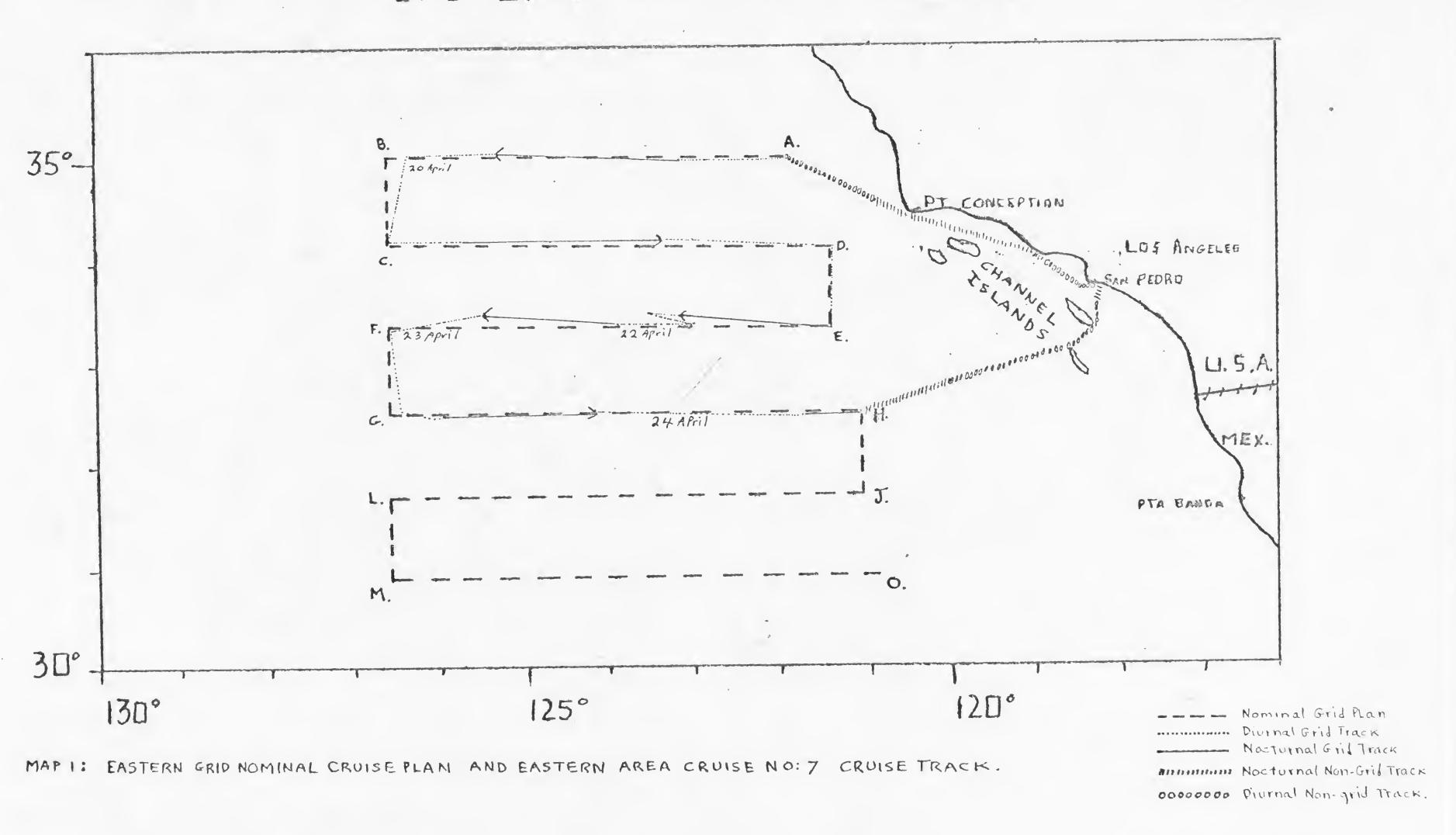
The only non-grid alcids were two Rhinoceros Auklets on the south leg outside of the islands.

#### NON-GRID MAMMALS

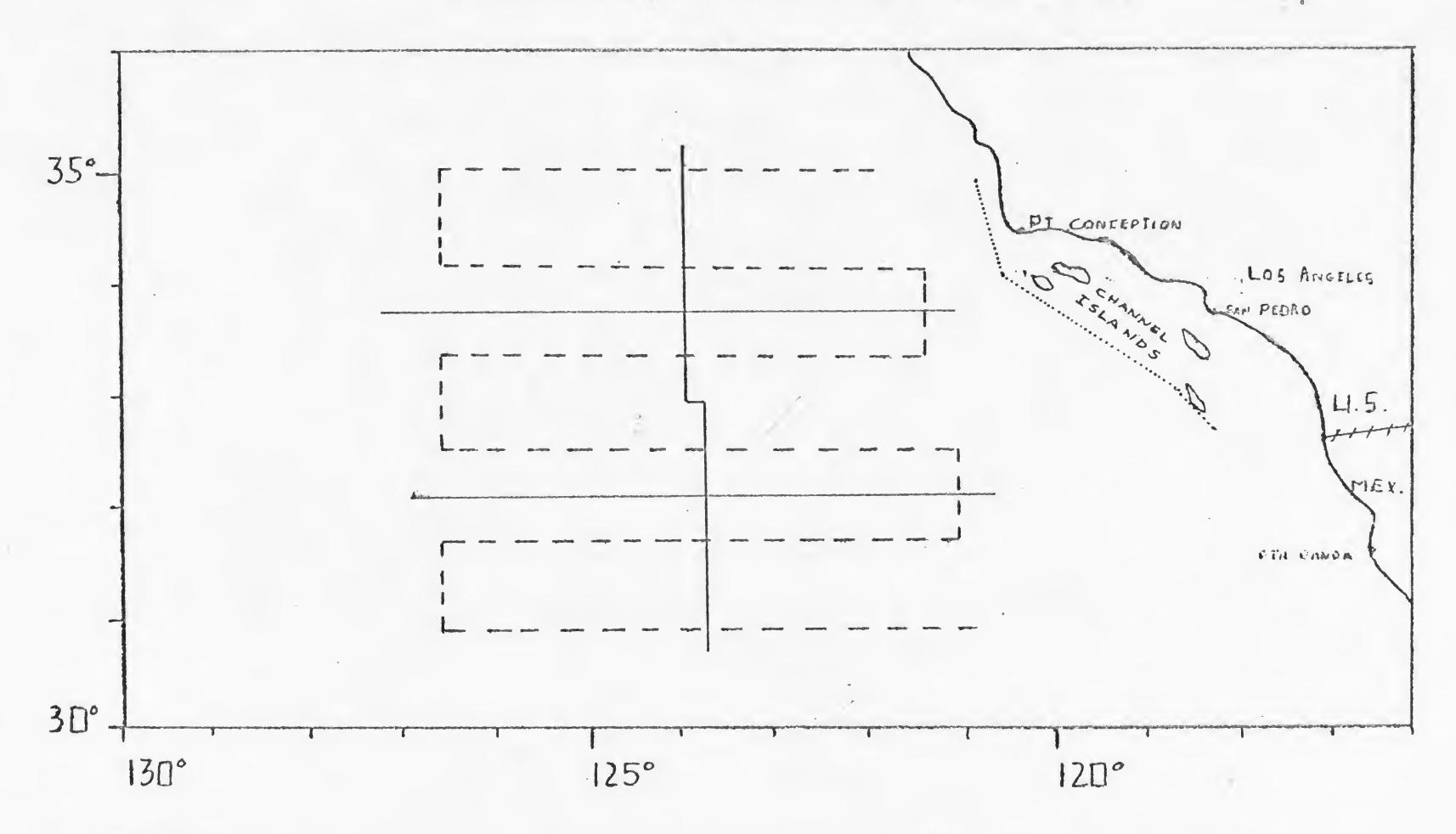
No marine mammals were seen inside the Channel Islands, and none were seen on the north portion of the non-grid cruise. On the south portion most sightings were of seals(10), four of which were thought to be California Sea Lions. In addition, five Dall Porpoise, two unidentified porpoise, a single Sperm Whale, and a Hubb's Beaked Whale were seen. The latter was well viewed at thirty to fifty feet from the ship. A description and notes were included on the log sheet.

No other marine mammals were seen on the non-grid cruise.

# EASTERN PACIFIC OCEAN



## EASTERN PACIFIC DEEAN



MAP 2: Grid pattern showing east-west and north-south divisions used in tables 2 and 3. Also shown is the Division used in table 7.

. Table 1: Diurnal Grid Summary, 19-24 April 1967, Eastern Grid Cruise 6

TATCIES	Number	% of Total Birds	No./lin.mile	No./59. mi.	No. collected	No. Sera Samples
Black-footed Albatross	35	3.0	.054	.014		
Laysan Albatross	1	.1	.002	.001		
Sooty Shearwater	18	115	.028	.014		
Leach's Storm Petrel	114	9.6	.176	.176	1	1
Red-tailed Tropicbird	2	2	.003	.002		
Herring Gull	4	•3	.006	.003		
Western Gull	4	•3	.006	.003	2	2
Short-billed Gull	1	.1	.002	.001	1	1
Sabine's Gull	2	•2	.003	.002		
omarine Jaeger	1	.1	.002	.001		
ong-tailed Jaeger	1	.1	.002	.001		
led Phalarope	927	78.2	1.428	2.856		•.
Black-bellied Plover	1	.1	.002	.002		
antus Murrelet	2	.2	.003	.006	ı	1
Bird sp.	4	•3	.003	.003		
Small Pterodroma	50	4.2	.039	.039		
Storm Petrel sp.	12	1.0	.018	.018		
Shearwater/Petrel	5	.4	.004	.004		
Gull sp.	1	.1	.001	.001		
Jaeger so.	2	.2	.002	.002		
TOTALS	1186	100.1			5	5
Total miles 647	1100	1.00.1				
•						

. Table 2: Sectional Breakdown of Eastern Pacific Grid Bird Populations, 19-24 April, 1967

	NO		ECTION		CE	NTRAL	SECTION		sou	TH SEC	TION	
	No.	Species Total	40 of total birds in North Section	Birds/Sq.mi.	No.	%	%	B./59. mi.	No.	0/6	0/0	B./sq.mi.
Black-foot.Albatross*	26	67	5.9	.020	13	33	1.7	.010	NOT	SURVE	YED	
Laysan Alpatross					1	100	.1	.001				
Sooty Shearwater	16	89	3.6	.025	2	11	•3	.003				
Leach's Storm Petrel	77	63	17.3	.236	37	37	4.7	.115				
Red-tailed Tropicbird	2	100	•5	.003			· ·					
Herring Gull	4	100	•9	.006								
Western Gull	4	100	•9	.006								
Sabine Gull	2	100	•5	.003								
Short-billed Gull	1	100	.2	.002								
Pomarine Jaeger	1	100	.2	.002								
Long-tailed Jaeger	1	100	.2	.002							Ÿ	
Red Phalarope	255	28	57.3	1.560	672	72	90.0	4.175				
Black-bellied Plover	1	100	.2	.003				6				
Xantus Murrelet					2	100	•3	.012				
Bird sp.					4	100	•5	.006				
Small Pterodroma	37	74	8.3	.057	13	26	1.7	.020				
Storm Petrel sp.	10	83	2.2	.031	2	17	•3	.006				
Shearwater/Petrel	5	100	1.1	.008								
Gull so.	1	100	.2	.002								
Jaeger so.	2	100	•5	.003								
TOTALS	445	•	100.0	1.967	746		99.6	4.348				
Total miles		327				322						

<sup>\*</sup> The total for the two sections may not agree with the grid total due to an allowance for birds which followed from one section to another.

Table 3: East-west Breakdown of Eastern Grid Bird Populations, 19-24 April 1967

		EASTERN HALF			<b>\</b>	ESTERN	HALF	-F		
Species	No.	o/o of Grid Species Total	. % of Total birds in East Section	Birds/sq. mile	No.	%	%	B./Sq. mi.		
Black-footed Albatross	26	74	2.8	.016	9	26	2.9	.010		
Laysan Albatross	1	100	.1	.001						
Sooty Shearwater	13	72	1.5	.016						
Leach's Storm Petrel	89	82	10.0	.215	25	1,8	8.0	.106		
Red-tailed Tropicbird	1	50	.1	.001	1	50	•3	.004		
Herring Gull	2	50	.2	.003	2	50	.6	.004		
Western Gull	4	100	•5	.005						
Short-billed Gull				,	1	100	•3	.004		
Sabine's Gull	2	100	.2	.003						
Pomarine Jaeger	1	100	.1	.001						
Long-tailed Jaeger	1	100	.1	.001						
Red Phalarope	698	75	80.0	3.374	229	. 25	73.2	1.950		
Black-bellied Plover			\$		1	100	•3	.004		
Kantus Murrelet	2	100	.2	.010						
Bird sp.	3	75	•3	.004	1	25	•3	.004		
Small Pterodroma	16	32	1.8	.020	34	68	10.1	.072		
Storm Petrel sp.	-11	92	1.3	.027	1	8	•3	.004		
Shearwater/Petrel	2	40	.2	.003	3	60	1.0	.007		
Gull sp.					1	100	.3	.004		
Jaeger sp.	2	100	•2	•003						
TOTALS	874	•	99.6		313		99.2			
Total miles		414				235				

<sup>\*</sup> The total for the two sections may not agree with the grid total due to an allowance for birds w

Table 4: Cruise Data Summary, Eastern Area Crimise 7; 18-25 April, 1967

Date	18	19	20	21	22	23	24	25
No. hours Diurnal Wateh	3.7	12.8	13.2	13.0	13.2	13.3	13.3	12.0
Birds/lin. mile	56.0	3.6	2.26	•79	6.54	.22	•57	18.9
No. Birds	2184	430	289	109	637	24	66	2026

Table 5: Summary of Nocturnal Observations, Eastern grid Cruise 6

Date	19	20	21	22 2	23	24	
Hours of . Observation	2	2	2	2	2	2	
bird	1				1	1	
Black-foot Albatross	ı`		1		1		
Storm Petrel	1		i				
Leach's	l	1					
Phalarope	3	1				3	
Shear/Petrel	1						
Albatross						1	
					0	-	
Totals	8	2	2	0	2	5	

Table 6: Diurnal Density of Species Groups in the Eastern Grid 19-24 April, 1967

Species Group	No. Birds	Birds/lin. mile	Birds/sq. mile	Percent of Total Birds
Albatross	36	.056	.014	3.0
Shearwater/Petrels	73	.113	•057	6.2
Storm Petrels	126	.195	.195	10.6
Tropicbirds	2	.003	.002	•2
Phalaropes	927	1.428	2.856	78.2
Gulls	. 12	.019	.010	1.0
Jaegers	4	•006	.003	•3
Alcids	2	.003	•006	•2
Miscellaneous	7	.011	.006	•6

Table 7: Summary of Non-grid Bird Observations, Eastern Area Cruise 7

	Inside Channel Islands			Outside Channel Islands					
Loon sp.	173	% of Total 7.9	#/lin mile 1.99	%inflocks+					
Black-footed Albatross	1	.1	.011	0	13	.6	.110	0	
Laysan Albatross	0				2	.1	.017	0	
Fulmar	0				1	•1	.008	0	
Sooty Shearwater	230	10.5	2.64	98	1970	97.3	16.70	98	
Pink-footed Shearwater	25	1.1	.288	50*	65	3.2	•550	80	
Brown Pelican	14	.6	.161	50*					
Cormorant sp.	5	•2	•057	0					
Pelagic Cormorant	2	.1	.023	0					
Blue-footed Booby	0				1	.1	.008	0	
Black Brant	18	.8	.207	100					
Northern Phalarope	1780	81.5	20.27	100					
Red Phalarope	0				4	•2	.034	0	
Phalarope sp.	0				7	•3	.059	0	
Pomarine Jaeger	1	.1	.oll	0	15	•7	.127	0	
Long-tailed Jaeger	0				1	.1	.008	0	
Jaeger sp.	0				19	•9	.161	0	
Western Gull	28	1.3	.310	10	13	•6	.110	10	
Herring Gull	1	.1	.011	0	5	•2	.042	0	
California Gull	136	6.2	1.56	95	1	.1	.008	0	
Ring-billed Gull	1	.1	.011	0					
Bonaparte's Gull	27	1.2	•322	95					
Sabine's Gull					7	•3	.059	0	
Tern sp.	1	.1	.011	0	2	.1	.017	0	
Rhinoceros Auklet	0				2	.1	.017	0	
TOTALS:	2184				2026				
Total miles		87				118			

<sup>\*</sup>Mixed Flocks

<sup>+</sup> Percentages estimated

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